Margherita Zavelani-Rossi

List of Publications by Year in descending order

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105 papers 3,597 citations

94269 37 h-index 57 g-index

105 all docs 105 docs citations

105 times ranked 4473 citing authors

#	Article	IF	CITATIONS
1	Gram-scale synthesis of carbon quantum dots with a large Stokes shift for the fabrication of eco-friendly and high-efficiency luminescent solar concentrators. Energy and Environmental Science, 2021, 14, 396-406.	15.6	174
2	Plasmon Dynamics in Colloidal Cu _{2–<i>x</i>} Se Nanocrystals. Nano Letters, 2011, 11, 4711-4717.	4.5	158
3	Ultrafast Electronâ^'Hole Dynamics in Core/Shell CdSe/CdS Dot/Rod Nanocrystals. Nano Letters, 2008, 8, 4582-4587.	4.5	146
4	Pulse compression over a 170-THz bandwidth in the visible by use of only chirped mirrors. Optics Letters, 2001, 26, 1155.	1.7	125
5	Lasing in self-assembled microcavities of CdSe/CdS core/shell colloidal quantum rods. Nanoscale, 2010, 2, 931.	2.8	120
6	Optical properties of waveguides written by a 26 MHz stretched cavity Ti:sapphire femtosecond oscillator. Optics Express, 2005, 13, 612.	1.7	115
7	Amplified spontaneous emission and efficient tunable laser emission from a substituted thiophene-based oligomer. Applied Physics Letters, 2002, 81, 3534-3536.	1.5	103
8	Suppression of Biexciton Auger Recombination in CdSe/CdS Dot/Rods: Role of the Electronic Structure in the Carrier Dynamics. Nano Letters, 2010, 10, 3142-3150.	4.5	97
9	Engineering interfacial structure in "Giant―PbS/CdS quantum dots for photoelectrochemical solar energy conversion. Nano Energy, 2016, 30, 531-541.	8.2	88
10	Plasmonics in heavily-doped semiconductor nanocrystals. European Physical Journal B, 2013, 86, 1.	0.6	76
11	Ultrafast carrier dynamics in core and core/shell CdSe quantum rods: Role of the surface and interface defects. Physical Review B, 2005, 72, .	1.1	72
12	Triplet-Exciton Generation Mechanism in a New Soluble (Red-Phase) Polydiacetylene. Physical Review Letters, 2001, 87, .	2.9	71
13	Near-field second-harmonic generation in single gold nanoparticles. Applied Physics Letters, 2008, 92, 093119.	1.5	70
14	Ultrafast FÃ \P rster transfer dynamics in tetraphenylporphyrin doped poly(9,9-dioctylfluorene). Chemical Physics Letters, 2001, 335, 27-33.	1.2	66
15	Single-mode picosecond blue laser emission from a solid conjugated polymer. Applied Physics Letters, 1998, 73, 2860-2862.	1.5	65
16	Lasing from all-polymer microcavities. Laser Physics Letters, 2014, 11, 035804.	0.6	65
17	Evidence for the Bandâ€Edge Exciton of CuInS ₂ Nanocrystals Enables Record Efficient Largeâ€Area Luminescent Solar Concentrators. Advanced Functional Materials, 2020, 30, 1906629.	7.8	65
18	Excitonic pathway to photoinduced magnetism in colloidal nanocrystals with nonmagnetic dopants. Nature Nanotechnology, 2018, 13, 145-151.	15.6	64

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19	Full temporal resolution of the two-step photoinduced energy–electron transfer in a fullerene–oligothiophene–fullerene triad using sub-10 fs pump–probe spectroscopy. Chemical Physics Letters, 2001, 345, 33-38.	1.2	62
20	Transient Optical Response of a Single Gold Nanoantenna: The Role of Plasmon Detuning. ACS Photonics, 2015, 2, 521-529.	3.2	62
21	Multiwatt, tunable, diode-pumped CW Yb:GdCOB laser. Applied Physics B: Lasers and Optics, 2001, 72, 389-393.	1.1	60
22	Early events of energy relaxation in all-trans- \hat{l}^2 -carotene following sub-10 fs optical-pulse excitation. Physical Review B, 2001, 63, .	1.1	60
23	Effect of Core/Shell Interface on Carrier Dynamics and Optical Gain Properties of Dual-Color Emitting CdSe/CdS Nanocrystals. ACS Nano, 2016, 10, 6877-6887.	7.3	57
24	Coherent Dynamics of Photoexcited Green Fluorescent Proteins. Physical Review Letters, 2001, 86, 3439-3442.	2.9	56
25	Subâ€Micrometer Charge Modulation Microscopy of a High Mobility Polymeric nâ€Channel Fieldâ€Effect Transistor. Advanced Materials, 2011, 23, 5086-5090.	11.1	55
26	Dual emission in asymmetric "giant―PbS/CdS/CdS core/shell/shell quantum dots. Nanoscale, 2016, 8, 4217-4226.	2.8	54
27	Two-step mechanism for the photoinduced intramolecular electron transfer in oligo(p-phenylene) Tj ETQq1 1 0.78	84314 rgBT	[gverlock]
28	Ultrafast optical excitations of metallic nanostructures: from light confinement to a novel electron source. New Journal of Physics, 2007, 9, 397-397.	1.2	50
29	Distributed Feedback Lasing from a Composite Poly(phenylene vinylene)â^'Nanoparticle One-Dimensional Photonic Crystal. Nano Letters, 2009, 9, 4273-4278.	4.5	48
30	Selfâ€assembled CdSe/CdS nanorod microâ€lasers fabricated from solution by capillary jet deposition. Laser and Photonics Reviews, 2012, 6, 678-683.	4.4	47
31	Ultrafast Optical Mapping of Nonlinear Plasmon Dynamics in Cu _{2–<i>x</i>} Se Nanoparticles. Journal of Physical Chemistry Letters, 2013, 4, 3337-3344.	2.1	47
32	Single-mode tunable organic laser based on an electroluminescent oligothiophene. Applied Physics Letters, 2001, 79, 4082-4084.	1.5	42
33	Monolithic polymer microcavity lasers with on-top evaporated dielectric mirrors. Applied Physics Letters, 2006, 88, 121110.	1.5	42
34	Highly efficient second-harmonic nanosource for near-field optics and microscopy. Optics Letters, 2004, 29, 62.	1.7	40
35	Photophysics of conjugated polymers: the contribution of ultrafast spectroscopy. Physica Status Solidi A, 2004, 201, 1116-1131.	1.7	39
36	Role of the shell thickness in stimulated emission and photoinduced absorption inCdSecore/shell nanorods. Physical Review B, 2006, 73, .	1.1	39

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37	Influence of the orientation of liquid crystalline poly(9,9-dioctylfluorene) on its lasing properties in a planar microcavity. Applied Physics Letters, 2002, 80, 4088-4090.	1.5	38
38	Two-Photon Poly(phenylenevinylene) DFB Laser. Chemistry of Materials, 2011, 23, 805-809.	3.2	36
39	Amplified spontaneous emission from core and shell transitions in CdSe/CdS nanorods fabricated by seeded growth. Applied Physics Letters, 2011, 98, .	1.5	35
40	Advanced laser-driven ion sources and their applications in materials and nuclear science. Plasma Physics and Controlled Fusion, 2020, 62, 014022.	0.9	35
41	Mode locking by cascading of second-order nonlinearities. IEEE Journal of Quantum Electronics, 1998, 34, 61-70.	1.0	34
42	The role of amplified spontaneous emission in the ultrafast relaxation dynamics of polymer films. Chemical Physics Letters, 1998, 289, 205-210.	1.2	33
43	Hollow-pyramid based scanning near-field optical microscope coupled to femtosecond pulses: A tool for nonlinear optics at the nanoscale. Review of Scientific Instruments, 2009, 80, 033704.	0.6	30
44	Ultrasmall Nanoplatelets: The Ultimate Tuning of Optoelectronic Properties. Advanced Energy Materials, 2017, 7, 1602728.	10.2	30
45	Amplified spontaneous emission from a soluble thiophene-based oligomer. Applied Physics Letters, 2001, 78, 2679-2681.	1.5	29
46	Characterization of femtosecond light pulses coupled to hollow-pyramid near-field probes: Localization in space and time. Applied Physics Letters, 2005, 86, 031105.	1.5	29
47	Ultrafast optical switching in distributed feedback polymer laser. Applied Physics Letters, 2007, 91, .	1.5	28
48	High-power diode-pumped Yb:GdCOB laser: from continuous-wave to femtosecond regime. Optical Materials, 2002, 19, 73-80.	1.7	27
49	Few-optical-cycle laser pulses by OPA: broadband chirped mirror compression and SPIDER characterization. Applied Physics B: Lasers and Optics, 2002, 74, s245-s251.	1.1	26
50	Transient Species Mediating Energy Transfer to Spin-Forbidden Mn d States in II–VI Semiconductor Quantum Dots. ACS Energy Letters, 2019, 4, 729-735.	8.8	26
51	Ultrafast light-emission processes in poly(para-phenylene)-type ladder polymer films. Physical Review B, 1999, 59, 11328-11332.	1.1	25
52	Colloidal Synthesis of Bipolar Off-Stoichiometric Gallium Iron Oxide Spinel-Type Nanocrystals with Near-IR Plasmon Resonance. Journal of the American Chemical Society, 2017, 139, 1198-1206.	6.6	25
53	Laser dynamics in organic distributed feedback lasers. Applied Physics Letters, 2006, 89, 181105.	1.5	23
54	Effects of morphology and optical contrast in organic distributed feedback lasers. Applied Physics Letters, 2007, 90, 111110.	1.5	22

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55	Control of thermal effects for high-intensity Ti:sapphire laser chains. Applied Physics B: Lasers and Optics, 2000, 70, S193-S196.	1.1	20
56	Modulating Exciton Dynamics in Composite Nanocrystals for Excitonic Solar Cells. Journal of Physical Chemistry Letters, 2015, 6, 2489-2495.	2.1	20
57	Evidence of Plasmon Enhanced Charge Transfer in Largeâ€Area Hybrid Au–MoS ₂ Metasurface. Advanced Optical Materials, 2020, 8, 2000653.	3.6	20
58	Real-time observation of coherent nuclear motion in polydiacetylene isolated chains. Physical Review B, 2004, 69, .	1.1	19
59	Ultrafast Exciton Dynamics in Colloidal CdSe/CdS Octapod Shaped Nanocrystals. Journal of Physical Chemistry C, 2011, 115, 9005-9011.	1.5	19
60	Sub-10 fs time resolved study of excited state relaxation in all-trans- \hat{l}^2 -carotene. Synthetic Metals, 2001, 116, 1-3.	2.1	18
61	Harvesting Delayed Fluorescence in Perovskite Nanocrystals Using Spin-Forbidden Mn d States. ACS Energy Letters, 2020, 5, 353-359.	8.8	18
62	Organic laser based on thiophene derivatives. Synthetic Metals, 2003, 139, 901-903.	2.1	17
63	Ultrafast Anisotropic Exciton Dynamics in Nanopatterned MoS ₂ Sheets. ACS Photonics, 2018, 5, 3363-3371.	3.2	17
64	Quantized Electronic Doping towards Atomically Controlled "Charge-Engineered―Semiconductor Nanocrystals. Nano Letters, 2019, 19, 1307-1317.	4.5	17
65	Intrinsic and Extrinsic Exciton Recombination Pathways in AgInS ₂ Colloidal Nanocrystals. Energy Material Advances, 2021, 2021, .	4.7	15
66	Dual emission and optical gain in PbS/CdS nanocrystals: Role of shell volume and of core/shell interface. Physical Review B, 2017, 96, .	1.1	14
67	Ultrafast photoexcitation dynamics in a ladder-type oligophenyl. Physical Review B, 2002, 66, .	1.1	13
68	High-resolution imaging of local oxidation in polyfluorene thin films by nonlinear near-field microscopy. Applied Physics Letters, 2007, 91, 191118.	1.5	13
69	Band-edge ultrafast pump–probe spectroscopy of core/shell CdSe/CdS rods: assessing electron delocalization by effective mass calculations. Physical Chemistry Chemical Physics, 2012, 14, 7420.	1.3	12
70	Ultra-fast spectroscopy and extreme nonlinear optics by few-optical-cycle laser pulses. Applied Physics B: Lasers and Optics, 2000, 71, 779-786.	1.1	10
71	Sub-10 fs excited state evolution in polycarbazolyldiacetylene–polyethylene blends. Synthetic Metals, 2001, 116, 57-60.	2.1	10
72	Mapping local field enhancements at nanostructured metal surfaces by second-harmonic generation induced in the near field. Journal of Microscopy, 2008, 229, 233-239.	0.8	10

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73	Imaging the Electricâ€Field Distribution in Organic Devices by Confocal Electroreflectance Microscopy. Advanced Functional Materials, 2009, 19, 1180-1185.	7.8	10
74	Retrieving the complex polarizability of single plasmonic nanoresonators. Physical Review B, 2009, 80,	1.1	10
75	Evidence of electron wave function delocalization in CdSe/CdS asymmetric nanocrystals. Superlattices and Microstructures, 2010, 47, 170-173.	1.4	10
76	Nd:YVO4 laser mode locked by cascading of second order nonlinearities. Optics Communications, 1998, 152, 45-48.	1.0	9
77	Role of defect states on Auger processes in resonantly pumped CdSe nanorods. Applied Physics Letters, 2007, 91, 093106.	1.5	9
78	Steady-state photoinduced absorption of CdSe/CdS octapod shaped nanocrystals. Physical Chemistry Chemical Physics, 2011, 13, 15326.	1.3	9
79	Ultrafast carrier dynamics and confined acoustic phonons in CdSe nanorods. Journal of Optics, 2008, 10, 064004.	1.5	8
80	Stimulated emission dynamics in a hexacatenar liquid crystal. Synthetic Metals, 2001, 121, 1323-1324.	2.1	7
81	Kinetics of interfacial charges in hybrid GaAs/oligothiophene semiconducting heterojunctions. Applied Physics Letters, 2007, 91, 122113.	1.5	7
82	Nearâ€field secondâ€harmonic generation from gold nanoellipsoids. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 2657-2661.	0.8	7
83	Pulsed laser deposition of carbon nanofoam. Applied Surface Science, 2022, 599, 153859.	3.1	7
84	Geometrical Engineering of Giant Optical Dichroism in Rippled MoS ₂ Nanosheets. Advanced Optical Materials, 2021, 9, 2001408.	3.6	6
85	Photoexcitation of conjugated systems studied with sub-10 fs time resolution. Synthetic Metals, 2001, 119, 491-494.	2.1	5
86	Mapping local field distribution at metal nanostructures by near-field second-harmonic generation. Proceedings of SPIE, 2007, , .	0.8	5
87	Influence of environment on the excited state deactivation in functionalized quinquethienyl in solution. Synthetic Metals, 2001, 119, 617-618.	2.1	3
88	Nonlinear optics and spectroscopy at the nanoscale with a hollow-pyramid aperture SNOM. Journal of Physics: Conference Series, 2007, 61, 125-129.	0.3	3
89	Waveguides in Ti:LiNbO 3 for second-harmonic generation: design and experimental tests. , 1996, , .		2
90	Perturbative analysis of transverse effects of χ^(2) cascading in resonators. Journal of the Optical Society of America B: Optical Physics, 1998, 15, 2929.	0.9	2

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91	Probing of bound electron–hole-pairs by optical re-excitation in a short-chain oligomer. Chemical Physics Letters, 2003, 381, 751-758.	1.2	2
92	Low threshold tunable lasing from a new substituted thiophene-based oligomer. Synthetic Metals, 2003, 137, 1485-1486.	2.1	2
93	Study of higher-energy core states in CdSe/CdS octapod nanocrystals by ultrafast spectroscopy. European Physical Journal B, 2012, 85, 1 .	0.6	2
94	Optical and Magneto-Optical Properties of Donor-Bound Excitons in Vacancy-Engineered Colloidal Nanocrystals. Nano Letters, 2021, 21, 6211-6219.	4.5	2
95	Ultrafast photoexcitation dynamics in a ladder-type oligophenyl. Synthetic Metals, 2001, 119, 609-610.	2.1	1
96	Femtosecond near-field optical microscope for nonlinear nanospectroscopy., 2005,,.		1
97	Ultrafast carrier dynamics in spherical CdSe core/elongated CdS shell nanocrystals. Springer Series in Chemical Physics, 2009, , 289-291.	0.2	1
98	High Intensity Lasers for nuclear and physical applications. , 2020, , .		1
99	Ultrafast Photophysics in Conjugated Polymers. , 2006, , 129-151.		0
100	Ultrafast optical modulation of polymer nano-structured lasers. , 2008, , .		0
101	Ultrafast electron-hole dynamics and optical gain in CdSe/CdS nanorods. , 2009, , .		0
102	Ultrafast Photonics in Polymer Nanostructures. , 2009, , 251-310.		0
103	Tuning the transient opto-electronic properties of few-layer MoS2 nanosheets via substrate nano-patterning. EPJ Web of Conferences, 2020, 238, 07006.	0.1	0
104	(Invited) Ultrafast Exciton Dynamics in Semiconductor Nanocrystals: Effects on Single Vs Dual Emission and on Optical Gain. ECS Meeting Abstracts, 2020, MA2020-01, 1100-1100.	0.0	0
105	(Invited) Ultrafast Spectroscopy in Semiconductor Nanocrystals: Revealing the Origin of Single Vs Double Emission, of Optical Gain and the Role of Dopants. ECS Meeting Abstracts, 2022, MA2022-01, 1104-1104.	0.0	0